

REMARKS

The description has been amended to correct minor informalities. We propose amending FIG. 2 as indicated in red on the accompanying sketch to correct minor informalities.

Claim 16 has been amended to depend on claim 13, claim 20 has been amended without narrowing to recite an antecedent.

Allowable claims, 26, 29, 65, 67 and 68 and claims 11, 13, 17, 24, 26, 29, 30, 57-60, 62, 64, 65, 67 and 68 have been rewritten in independent form without narrowing these claims. Claims 1-10, 21-23, 25, 27, 28, 32, 54, 56 and 63 have been canceled. Claims 12, 14, 15, 16, 18, 19, 31, 39-53, 61 and 66 are presented without amendment for reconsideration in the light of the following remarks and authorities. New claims 69-74 are presented to particularly point out and distinctly claim features of the invention. Such cancellation and amendment of claims is only for the purpose of advancing the prosecution of this application and is not to be construed as any abandonment of any of the novel concepts disclosed therein.

The requirement for restriction is again respectfully traversed.

In the requirement for restriction, the Office Action dated March 11, 2003, states, "Inventions I, II, III and IV are related as subcombinations disclosed as usable together in a single combination." Manifestly, subcombinations are properly patented in a patent also claiming the combination. "The statutes permit, and it is the settled practice of the Patent Office, many times sustained by this Court, to allow claims to a combination and also its subcombinations." *Special Equip. Co. v. Coe*, 64 U.S.P.Q. 525, 529 (U.S. 1945) and cases cited.

Regarding the failure of the Examiner to show that the claims in each group "ARE PATENTABLE (novel and unobvious) OVER EACH OTHER," the Examiner states that it is unclear by the Applicant's comments if the Applicant is stating that claims 33-40, 42-50 are obvious in view (or the same invention as that) of claims 1-32, 41 and 51-68 or not. Applicant did not state that claims 33-40, 42-50 are obvious in view (or the same invention as that) of claims 1-32, 41 and 51-68. The burden is on the Examiner to make a prima facie showing of unobviousness, and the Examiner has not made such a showing or ruling here. Should the

requirement for restriction be repeated, the Examiner is again respectfully requested to rule that the claims in each Group "ARE PATENTABLE (novel and unobvious) OVER EACH OTHER."

Manifestly, search and examination of the entire application can be made without serious burden because prior art searched in connection with evaluating the patentability of the subject matter of Group I must be searched to properly evaluate the subject matter in the eight claims of Group II directed to a screen, the five claims of Group III directed to a projector and the four claims of Group IV having both the projector and screen. Surely examining the 17 claims in the three unelected groups can be accomplished without serious burden while examining the claims in Group I having subject matter in common with these claims. Accordingly, withdrawal of the requirement for restriction is again respectfully requested.

The drawings are objected to under 37 C.F.R. § 1.83(a). It is said that the bands less than about 10 percent of center wavelength at full width half maximum (see i.e., claim 11), and the room embracing the projector projection screen having ambient light containing a wide band of optical wavelengths but having reduced energy in the predetermined narrow bandwidths, with specific reference to claim 29, must be shown or the features canceled from the claims. This objection is respectfully traversed. FIG. 12 shows the room embracing the projector and projector screen having ambient light containing a wide band of optical wavelength and having reduced energy in a predetermined number of narrow bands of optical energy. If the Examiner wants us to include a legend in FIG. 12 setting forth what the specification sets forth in haec verba, we are amenable to amending FIG. 12 of the drawing accordingly.

As to the elements of claim 41, FIG. 7 of the drawing illustrates these elements. Accordingly, withdrawal of the objection to the drawing is respectfully requested.

Objection to the disclosure because of specific minor informalities on pages 12 and 13 is noted. The specification has been amended to correct these informalities.

UHP is not a trademark, but an abbreviation for ultra-high-pressure as explained on page 11, line 29.

Claims 16, 20 and 64 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

Applicant regards as the invention. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim is said to not clearly set forth the metes and bounds of the patent protection desired. Specific reference is made to *Ex parte Wu*, 10 U.S.P.Q.2d 2031, 2033 (BPA&I 1989), as to where broad language is followed by "such as" and then narrow language.

As to claim 16, the Examiner questions what Applicant means by approximately 5 to 50 layers. For example, does this encompass two layers? Furthermore, it is said to be unclear how a coating of 60,000 nm may be obtained from 50 layers each about 200 nm thick (100 nm + 70 nm). At best this is said to equal a total thickness of around 10,000 nm.

There is said to be lack of antecedent basis for the source of optical energy recited in claim 20.

It is said to be unclear in claim 64 if UHP bulbs are a trademark type of bulb or not.

These grounds of rejection are respectfully traversed. Claim 10 particularly points out and distinctly claims the wavelength ranges of the recited blue, green and red. Claim 16 particularly points out and distinctly claims the range of approximately 5 to 50 layers to form a coating of thickness in the range of approximately 1000 to 6000 nm. In *Andrew Corp. v. Gabriel Elec., Inc.*, 6 U.S.P.Q. 2d 2010 (Fed. Cir. 1988), the court ruled that the district court erred in finding the claims invalid for indefiniteness because of the use of "substantially equal," inter alia, and said, "The criticized words are ubiquitous in patent claims. Such usages, when serving reasonably to describe the claimed subject matter to those of skill in the field of the invention, and to distinguish the claimed subject matter from the prior art, have been accepted in patent examination and upheld by the courts." *Id.* 2012. This decision is binding on the PTO.

We take this occasion to explain what precedents are considered binding in proceedings in the Patent and Trademark Office (PTO). Where the Court of Appeals for the Federal Circuit has addressed a point of law in a published opinion, the Federal Circuit's decision is controlling. Similarly controlling are decisions considered to be binding precedent by the Federal Circuit, i.e., decisions of the former Court of Claims and the former Court of Customs and Patent Appeals, as well as the former Customs Court. See *South Corp. v. United States*, 690 F.2d 1368, 215 USPQ 657 (Fed. Cir. 1982)(in banc); *Bar Zell Expeditors, Inc. v. United States*, 698 F.2d 1210, 1211 n. 4 (Fed. Cir. 1983). In those

relatively rare cases where the Federal Circuit has not addressed an issue, but there is "authorized published" Board precedent, that published Board precedent is binding on panels of the Board and Examiners in the Patent Examining Corps. *Ex parte Holt*, 19 U.S.P.Q. 2d 1211, 1214 (BPA&I 1991).

Claim 16 does not restrict the layers to consisting only of low index-of-refraction material layers and high index-of-refraction material. For example, FIG. 7 shows other layers comprising the multilayer interference coating.

We have amended claim 20 without narrowing the claim by reciting the source of optical energy.

Regarding claim 64, UHP is not a trademark, but an abbreviation for ultra-high-pressure.

Accordingly, withdrawal of the rejection of claims 10, 16, 20 and 64 under 35 U.S.C. § 112, second paragraph is respectfully requested.

Claim 60 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Takayama. This reference is said to teach a selective reflective optical apparatus comprising a projection screen, FIGS. 1, 8, having a structure constructed and arranged to selectively reflect only incident optical energy of a predetermined number of narrow bands of optical wavelength regions, FIGS. 6, 9. A multilayer interference layer RS, GS, BS, column 2, line 55, is said to reflect light in the selective bands and pass other light, with specific reference to column 2, lines 54-56. The selective bands are said to be approximately red, green and blue, with specific reference to column 2, line 59. A light absorbing material SBL is said to absorb light energy within the regions between regions other than the narrow bands, with specific reference to column 2, line 23 and column 3, lines 6-9. A projector P is said to project light in frequency regions corresponding to the narrow bands, with specific reference to FIG. 3 and column 3, lines 32-39. Regarding claim 60, the ambient light is said to be filtered at/in screen.

This ground of rejection is respectfully traversed.

"It is well settled that anticipation under 35 U.S.C. 102 requires the presence in a single reference of all of the elements of a claimed invention." *Ex parte Chopra*, 229 U.S.P.Q. 230, 231 (BPA&I 1985) and cases cited.

"Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim." *Connell v. Sears, Roebuck & Co.*, 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983).

"This court has repeatedly stated that the defense of lack of novelty (i.e., 'anticipation') can only be established by a single prior art reference which discloses each and every element of the claimed invention." *Structural Rubber Prod. Co. v. Park Rubber Co.*, 223 U.S.P.Q. 1264, 1270 (Fed. Cir. 1984), citing five prior Federal Circuit decisions since 1983 including *Connell*.

In a later analogous case the Court of Appeals for the Federal Circuit again applied this rule in reversing a denial of a motion for judgment n.o.v. after a jury finding that claims were anticipated. *Jamesbury Corp. v. Litton Industrial Prod., Inc.*, 225 U.S.P.Q. 253 (Fed. Cir. 1985).

After quoting from *Connell*, "Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim," 225 U.S.P.Q. at 256, the court observed that the patentee accomplished a constant tight contact in a ball valve by a lip on the seal or ring which interferes with the placement of the ball. The lip protruded into the area where the ball will be placed and was thus deflected after the ball was assembled into the valve. Because of this constant pressure, the patented valve was described as providing a particularly good seal when regulating a low pressure stream. The court quoted with approval from a 1967 Court of Claims decision adopting the opinion of then Commissioner and later Judge Donald E. Lane:

[T]he term "engaging the ball" recited in claims 7 and 8 means that the lip contacts the ball with sufficient force to provide a fluid tight seal. *** The Saunders flange or lip only sealingly engages the ball 1 on the upstream side when the fluid pressure forces the lip against the ball and never sealingly engages the ball on the downstream side because there is no fluid pressure there to force the lip against the ball. The Saunders sealing ring provides a compression type of seal which depends upon the ball pressing into the material of the ring. *** The seal of Saunders depends primarily on the contact between the ball and the body of the sealing ring, and the flange or lip sealingly contacts the ball on the upstream side when the fluid pressure increases. 225 U.S.P.Q. at 258.

Relying on *Jamesbury*, the ITC said, "Anticipation requires looking at a reference, and comparing the disclosure of the reference with the claims of the patent in suit. A claimed device is anticipated if a single prior art reference discloses all the elements of the claimed invention as arranged in the claim." *In re Certain Floppy Disk Drives and Components Thereof*, 227 U.S.P.Q. 982, 985 (U.S. ITC 1985).

Claim 60 has been rewritten in independent form without being narrowed. There is no disclosure in the reference of the structure wherein the ambient light is filtered to remove light in the predetermined number of narrow bands called for by claim 60.

If this rejection of claim 60 is repeated, the Examiner is respectfully requested to quote verbatim the language in the reference regarded as corresponding to the limitation of the ambient light being filtered to remove light in the predetermined number of bands called for by claim 60.

Claims 11 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Takayama. The reference is said to disclose the claimed invention except for using a less than 10 percent bandwidth or 6 percent bandwidth. It is said it would have been obvious to one of ordinary skill in the art at the time the invention was made to design the filters to be at less than 6 percent or 10 percent of the center bandwidth for the purpose of using an optimum or working bandwidth. The Applicant should note that it has been held that where the general working conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, citing *In re Aller*, 105 U.S.P.Q. 233 (C.C.P.A. 1955).

This ground of rejection is respectfully traversed. "The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). Nothing in the reference suggests the desirability of modifying what is there disclosed to meet the terms of claims 11 and 12.

In *Aller*, the prior art showed essentially the same process. The case did not discuss section 103.

Accordingly, withdrawal of the rejection of claims 11 and 12 as unpatentable over the reference under section 103 is respectfully requested. If this ground of rejection is repeated, the

Examiner is respectfully requested to quote verbatim the language in the reference regarded as suggesting the desirability of modifying what is there disclosed to meet the terms of claims 11 and 12.

Claims 13, 14, 24, 51 and 59 stand rejected under 35 U.S.C. §103(a) as unpatentable over Takayama as a primary reference in view of Pagis as a secondary reference. The primary reference is said to teach the salient features of the claimed invention except for explicitly stating that the multilayer interference filter comprises a plurality [approximately 5-50 layer] of alternating low index of refraction material [SiO₂] and high index of refraction material [TiO₂]. Multilayer interference filters are made by a plurality of alternating low index of refraction material [SiO₂] and high index of refraction material layers. The secondary reference is said to teach that it was known to make a multilayer interference filter comprising a plurality of alternating low index of refraction of material and high index of refraction material where the low index of refraction material is TiO₂ and the high index of refraction material is SiO₂. The Applicant is said to be directed to review column 3, lines 29-35, 57, 64 and the abstract. It is said it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features as said to be taught by the secondary reference for the purpose of utilizing readily available materials. It is said that the Applicant should note that it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice, citing *Leshin*.

This ground of rejection is respectfully traversed.

"The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

"Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, '[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.'" *In re Laskowski*, 10 U.S.P.Q. 2d 1397, 1398 (Fed. Cir. 1989).

"The claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984).

"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under Section 103, teachings of references can be combined only if there is some suggestion or incentive to do so." *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984) (emphasis in original, footnotes omitted).

"The critical inquiry is whether 'there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination. [citing *Lindemann* with emphasis added.]" *Fromson v. Advance Offset Plate, Inc.*, 225 U.S.P.Q. 26, 31 (Fed. Cir. 1985).

As the Federal Circuit Court of Appeals said in *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999):

Close adherence to this methodology is especially important of less technologically complex inventions, where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.'

And in *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000), the Court said:

[I]dentification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. *See id.* [*Dembiczak*]. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *See In re Dance*, 160 F.3d 1339, 1343, 48 U.S.P.Q.2d 1635, 1637 (Fed. Cir. 1998), *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. *See B. F. Goodrich Co. v. Aircraft Braking Sys. Corp.*, 72 F.3d 1577, 1582, 37 U.S.P.Q.2d 1314, 1318 (Fed. Cir. 1996).

Nothing in the references suggest the desirability of combining what is there disclosed to meet the terms of these claims. With respect to the comment regarding a matter of obvious design choice, that is a conclusion, not a reason. In *In re Garrett*, 33 PTCJ 43 (BPA&I, September 30, 1986) the Board criticized the Examiner's statement that the proposed modification would have been "an obvious matter of engineering design choice" as a conclusion, not a reason, in reversing the section 103 rejection.

In *Leshin*, the material of molded plastic was not specified in the claims covering a cosmetic dispenser, like a prior art lipstick dispenser, and the rejection of dependent claim 18 was reversed.

Nothing in the references suggests the desirability of combining what is there disclosed to meet the terms of claims 13, 14, 24, 51 or 59. The secondary reference discloses selectively removing energy in the narrow bands, not reflecting the energy as called for by the rejected claims. The proposed combination would result in energy removal, not deflection. Neither reference discloses the coating deposited bidirectionally in pairs of high and low refractive index materials added by claim 51 or the coating that is an interference coating on a second substrate transferred from a first substrate called for by claim 59.

We have shown above that the rejection based on a matter of obvious design choice is a conclusion, not a reason, citing *Garrett* and shown the inapplicability of *Leshin*. Accordingly, withdrawal of the rejection of claims 13, 14, 24, 51 and 59 is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of these rejected claims.

Claims 15 and 16 stand rejected under 35 U.S.C. §103(a) as unpatentable over Takayama as a primary reference in view of Pagis as a secondary reference. The primary and secondary references are said to teach the salient features except for the thicknesses of the low index of refraction material being approximately 100 nm and the thickness of the high index of refraction material being approximately 70 nm and the overall thickness being in the range of approximately 1,600 nm. It is said it would have been obvious to one of ordinary skill in the art

at the time the invention was made to utilize thicknesses of the low index of refraction material being approximately 100 nm and the thickness of the high index of refraction material being approximately 70 nm and the overall thickness being in the range of approximately 1000 - 6000 nm for the purpose of optimizing the working values. It is said the Applicant should note that it has been held that where the general working conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, again citing *Aller*.

This ground of rejection is respectfully traversed. Nothing in the references suggest the desirability of combining what is there disclosed to meet the terms of claims 15 and 16. Furthermore, it is impossible to combine the references to meet the terms of claims 15 and 16. "Moreover, we observe that even if these references were combined in the manner proposed by the examiner, that which is set forth in appellant's claims . . . would not result." *Ex parte Bogar*, slip op. p.7 (BPA&I Appeal No. 87-2462, October 27, 1989). "Even if we were to agree with the examiner that it would have been obvious to combine the reference teachings in the manner proposed, the resulting package still would not comprise zipper closure material that terminates short of the end of the one edge of the product containing area, as now claimed." *Ex parte Schwarz*, slip op. p.5 (BPA&I Appeal No. 92-2629 October 28, 1992). "Although we find nothing before us indicating why it would be desired to combine the references in the manner urged by the examiner, it is clear to us that such a modification by itself would not result in that which is set forth in the claims." *Ex Parte Kusko*, 215 U.S.P.Q. 972, 974 (BPA&I 1981). That it is impossible to combine the references to meet the terms of claims 15 and 16 is reason enough for withdrawing the rejection.

Claims 17-19 stand rejected as unpatentable over Takayama as a primary reference in view of Goto as a secondary reference. The primary reference is said to teach the salient features of the claimed invention except for a diffusion element comprised of lenticular elements which diffusion is said to have a greater span in the horizontal than in the vertical. The secondary reference is said to teach that it was known to provide a lenticular pattern 93 on the exit surface of a reflection screen to provide diffusion having a greater span in the horizontal than in the

vertical. It is said it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features as taught by the secondary reference for the purpose of effectively utilizing the reflected image light by controlling view angle. This ground of rejection is respectfully reversed.

Nothing in the references suggests the desirability of combining what is there disclosed to meet the terms of these rejected claims. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of these claims.

Claims 20, 30, 31 and 61 stand rejected as unpatentable over Takayama as a primary reference in view of Braun as a secondary reference. The primary reference is said to teach the salient features of the claimed invention except for linear polarizer on the projection screen and synchronization with polarization from a projector. The secondary reference is said to teach that it was known to provide a linear polarizer on the projection screen and synchronization with polarization from the projector. The Applicant is said to be directed to review the abstract as well as column 7, lines 22-30. It is said it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features as said to be taught by the secondary reference for the purpose of using high contrast without requiring darkened ambient conditions.

This ground of rejection is respectfully traversed. Nothing in the references suggests the desirability of combining what is there disclosed to meet the terms of these claims. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of these claims.

Claim 41 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Yamada as a primary reference in view of Takayama as a secondary reference. The primary reference is said to teach the salient features of the claimed invention except for the frequency selective filter. The secondary reference is said to teach that it was known to provide frequency selective filters SBL, BS, GS, RS. It is said it would have been obvious to one of ordinary skill in the art at the

time the invention was made to utilize the features that are said to be taught by the primary reference for the purpose of increased contrast in well-lit conditions.

This ground of rejection is respectfully traversed. Nothing in the references suggests the desirability of combining what is there disclosed to meet the terms of this claim. Neither reference discloses the claimed materials having firefringent characteristics.

If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as corresponding to the elements in claim 41 and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of claim 41.

Claims 52, 53 and 62 stand rejected as unpatentable over Takayama as a primary reference in view of Mihalakis as a secondary reference. The primary reference is said to teach the salient features of the claimed invention except for the specific types of projectors used. The secondary reference is said to teach that DMD, liquid-crystal-on-silicon and other types of projectors are known equivalents in the art. The Applicant is said to be directed to review column 1, lines 11 and 24. It is said it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize DMD, liquid-crystal-on-silicon or any other type of projector for the purpose of utilizing the most cost effective projection means available. This ground of rejection is respectfully traversed.

Nothing in the references suggests the desirability of combining what is there disclosed to meet the terms of these claims. The secondary reference discloses the undesirability of combining a DMD device with the primary reference in column 1, lines 21-24, identifying drawbacks of DMD devices, such as number of optical components, precision of positioning and high cost. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of these claims.

Claims 57 and 58 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Takayama as a primary reference in view of De Palma as a secondary reference. The primary reference is said to teach the salient features of the claimed invention except for preshifted front

or curved screen to compensate for the angle of incidence light upon the screen. FIG. 3 of the secondary reference is said to teach the preshifted front, FIG. 4 is said to show the resultant distribution of light, and FIGS. 18 and 19 show that the screen may be curved. It is said it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features as said to be taught by the secondary reference for the purpose of a definitely controllable field through which instant radiation is redistributed, uniform radiance throughout such field, high efficiency due to a definite separation of the field of redistribution from the environmental field and due to minimum absorption losses at the redistributing surface of such devices, and a favorable rejection of radiation impinging on the device from sources other than those intended for irradiating the device.

This ground of rejection is respectfully traversed.

Nothing in the references suggest the desirability of combining what is there disclosed to meet the terms of these claims. Neither reference discloses a preshifted coating.

If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of these claims.

Claim 64 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Takayama. The reference is said to teach the salient features of the claimed invention except for optimizing the wavelength ranges of said narrow bands for non-UHP bulbs. It is said it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the wavelength ranges of said narrow bands for non-UHP bulbs for the purpose of using projectors which do not utilize a UHP bulb. For example, a laser projector may be used. The Applicant should also note that it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art, citing *In re Boesch*, 205 U.S.P.Q. 215 (C.C.P.A. 1980).

This ground of rejection is respectfully traversed. Nothing in the reference suggests the desirability of modifying what is there disclosed to optimize the wavelength ranges of the narrow bands for non-UHP bulbs in the associated projector. If this ground of rejection is repeated, the

Examiner is respectfully requested to quote verbatim the language in the reference regarded as suggesting the desirability of optimizing the wavelength ranges of the narrow bands for non-UHP bulbs in the associated projector.

In *Boesch*, each of the ranges of constituents in the claimed alloys overlapped those in the references.

The 1984 case of the Federal Circuit Court of Appeals in *Gordon*, requires that in order to support a rejection under section 103 based on a single reference, the single reference must suggest the desirability of modifying what is there disclosed to meet the terms of the claim being rejected.

The allowance of claim 66 and allowability of claims 26, 29, 65, 67 and 68 is noted.

Allowable claims 26, 29, 65, 67 and 68 have been rewritten in independent form without being narrowed.

New claims 69-74 have been added to particularly point out and distinctly claim the features of the invention and are submitted to be patentable in the absence of pertinent prior art.

The courtesy of the Examiner in conducting a diligent search is acknowledged with appreciation. The prior art made of record and not relied upon has been examined and is submitted to be incapable of anticipating, suggesting or making obvious the subject matter as a whole of the invention disclosed and claimed in this application.

In view of the foregoing cancellations, amendments, authorities and the inability of the prior art, alone or in combination, to anticipate, suggest or make obvious the subject matter as a whole of the invention disclosed and claimed in this application, all the claims are submitted to be in a condition for allowance, and notice thereof is respectfully requested. In the absence of pertinent prior art, the claims that have not been examined are submitted to also be properly in a condition for allowance.

Should the Examiner believe this application is not in a condition for allowance, he is respectfully requested to telephone the undersigned attorney at (617) 521-7014 to discuss what additional steps he believes are necessary to place the application in a condition for allowance.

Applicant : Barret Lippey, et al.
Serial No. : 10/028,063
Filed : December 21, 2001
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Attorney's Docket No.: 02103-406001 / AABOSS32

Enclosed is a \$1548 check for excess claim fees and a \$950 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050, Order No. 02103-406001.

Respectfully submitted,

FISH & RICHARDSON P.C.

Date: DEC 24 2003


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	Material	Thickness (nm)			
	Si	6.00	Nb_2O_5	NB2O5	26.48
	SiO ₂	3.30	Nb_2O_5	NB2O5	97.79
Nb_2O_5 5	NB ₂ O ₅	3.30	SiO ₂	SiO ₂	97.79
Nb_2O_5	NB ₂ O ₅	50.34	SiO ₂	SiO ₂	100.00
	SiO ₂	50.34	Nb_2O_5	NB2O5	100.00
	SiO ₂	100.00	Nb_2O_5	NB2O5	6.01
Nb_2O_5	NB ₂ O ₅	100.00	SiO ₂	SiO ₂	6.01
Nb_2O_5 10	NB ₂ O ₅	59.38	SiO ₂	SiO ₂	35.12
	SiO ₂	59.39	Nb_2O_5	NB2O5	35.12
	SiO ₂	100.00	Nb_2O_5	NB2O5	28.25
Nb_2O_5	NB ₂ O ₅	100.00	SiO ₂	SiO ₂	28.25
Nb_2O_5	NB ₂ O ₅	15.15	SiO ₂	SiO ₂	19.65
15	SiO ₂	15.15	Nb_2O_5	NB2O5	19.65
	SiO ₂	99.45	Nb_2O_5	NB2O5	30.09
Nb_2O_5	NB ₂ O ₅	99.45	SiO ₂	SiO ₂	30.09
Nb_2O_5	NB ₂ O ₅	43.95	SiO ₂	SiO ₂	4.27
	SiO ₂	43.95	Nb_2O_5	NB2O5	4.27
20	SiO ₂	48.60	Nb_2O_5	NB2O5	21.91
Nb_2O_5	NB ₂ O ₅	48.60	SiO ₂	SiO ₂	21.91
Nb_2O_5 20	NB ₂ O ₅	55.28	20		
	SiO ₂	55.28			
	SiO ₂	70.29			
Nb_2O_5 25	NB ₂ O ₅	70.29			
Nb_2O_5	NB ₂ O ₅	78.38			
	SiO ₂	78.38	25		
	SiO ₂	23.91			
	Nb_2O_5	23.91			
Nb_2O_5 30	NB2O5	100.00			
SiO ₂	SiO ₂	100.00			
SiO ₂	SiO ₂	26.48			

FIG. 2